

Vermont Superintendents Association

School Energy Management Program



Memorandum

To: Vermont House Education Committee

From: Norm Etkind, Director, Vermont Superintendents Association - School Energy

Management Program

Date: April 13, 2015

RE: H.280 - - School Lighting Design

Cc: Jeff Francis, Executive Director – Vermont Superintendents Association

Recently, the IESNA (Illumination Engineering Society of North America) has modified the way they describe the recommended light levels for classrooms.

In the Tenth Edition of their "Lighting Handbook", they broke out the age groups for the people using the space. While before they had a blanket 50 foot-candles as the recommended desktop illumination level, for students under the age of 25 the recommended level is now 20 foot-candles.

The Department of Education (now the Agency of Education) at the time used the 50 foot-candle IESNA recommendation to inform their rules for school construction.

Now we know through IESNA that 20 foot-candles is the appropriate amount of illumination for K-12 classrooms.

This new recommended level will save a considerable amount of electricity and provide for an enhanced learning environment.

Since this change I have performed energy assessments on over 100 school buildings in Vermont. Many of these schools had some areas that were already at a 20 foot-candle (fc) level. None of these represented any problem due to lower light levels. Many teachers actually cover up fixtures in the classrooms because they are too bright at the 50 fc level.

In summary, I have found that the 20 fc level works well for schools and support this bill that will rely upon the expertise of IESNA when setting appropriate illumination levels.